



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,798

09/29/2006

Barry W. Townsend

183.39735AX9

7125

20457 7590 08/16/2011
ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

BLANCO, JAVIER G

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

08/16/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,798	Applicant(s) TOWNSEND ET AL.	
	Examiner JAVIER BLANCO	Art Unit 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43.44 and 46-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43.44 and 46-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 24, 2011 has been entered.

Response to Amendment

2. Applicants' amendment of claim 43 in the reply filed on INDICATE is acknowledged.
3. Applicants' cancellation of claims 45 and 52 in the reply filed on INDICATE is acknowledged.

Claim Objections

4. Claim 1 is objected to because of the following informality: please substitute each instance of "sagital" with --sagittal--. Appropriate correction is required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

Art Unit: 3774

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 43, 44, and 46-51 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. **7,374,578 B2**.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference between claims 43, 44, and 46-51 of the application and claims 1-23 of U.S. Patent No. **7,374,578 B2** lies in the fact that the patent claims include many more elements and is thus much more specific. Thus the invention of claims 1-23 of U.S. Patent No. **7,374,578 B2** is in effect a “species” of the “generic” invention of claims 43, 44, and 46-51. It has been held that the generic invention is “anticipated” by the “species”. See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since claims 43, 44, and 46-51 of the application are anticipated by claims 1-23 of U.S. Patent No. **7,374,578 B2**, it is not patentably distinct from claims 1-23 of U.S. Patent No. **7,374,578 B2**.

7. Claims 43, 44, and 46-51 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

(i) Pending claims of copending Application No. **11/234,159**;

(ii) Pending claims of copending Application No. **11/411,133**;

Art Unit: 3774

- (iii) Pending claims of copending Application No. **11/643,676**;
- (iv) Pending claims of copending Application No. **11/643,677**;
- (v) Pending claims of copending Application No. **10/594,797**; and
- (v) Pending claims of copending Application No. **12/886,758**.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the above-indicated applications claim a resilient foot (or foot plate) and a resilient leg portion including a plurality of elongated, upwardly extending, substantially vertically oriented resilient members which are spaced apart in the sagittal plane intermediate their upper and lower ends and which are anterior facing convexly curved at their lower ends. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 43, 44, and 46-51 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **F.W. Neubert** (US 0,450,297).

Referring to Figure 1, **F.W. Neubert** discloses a prosthetic foot comprising:

- (i) A resilient foot (2/3);
- (ii) A resilient leg portion attached to the foot;

Art Unit: 3774

wherein the resilient leg portion includes a plurality of elongated, upwardly extending, substantially vertically oriented resilient members (strap 19, which includes spring 20, and “back muscle” 17) which are spaced apart in the sagittal plane intermediate their upper and lower ends, and which are anterior facing convexly curved at their lower ends to form an ankle area of the prosthesis and which extend upwardly above the ankle area to a substantially vertically oriented upstanding upper end of the leg portion, at least one of said plurality of resilient members (e.g., strap 19) is wider in the frontal plane than thick in the sagittal plane, the resilient leg portion storing energy during force loading of the prosthesis and return the stored energy during force unloading (e.g., controls anterior movement, and assists posterior movement) to increase the kinetic power generated for propulsive force by the prosthesis in gait.

Regarding claim 44, the figures clearly show the plurality of elongated members as fastened together at their upper (via 22) and lower (via 2) ends.

Regarding claim 46, the shank is strap 19/spring 20, and the spring is “back muscle” 17.

Regarding claim 47 and claim 48, the “coupling means” is any of 4, 6, and/or 10; the “fastener” is any of 11/12 and/or 18. The “stop” is any of 23, 4, and/or 21.

Regarding claim 49, the “adapter” is any of 1 and/or 22.

Regarding claim 50, it is inherent a prosthesis mimicking a natural foot, or natural foot and shank, will have a “dorsiflexion moment” that at one given moment will have a magnitude greater than a “plantarflexion moment”.

Regarding claim 51, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured **F.W. Neubert** lower extremity prosthesis to have a ratio of dorsiflexion moment to plantarflexion moment of the prosthesis on the order of

Art Unit: 3774

11:1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function.

In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). With regards to statements of intended use and other functional statements (e.g., *to increase the kinetic power; etc.*), they do not impose any structural limitations on the claims distinguishable over the device of **F.W. Neubert**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

Art Unit: 3774

10. Claims 43, 44, and 46-51 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Atkinson et al.** (US PG Pub No. 2002/0087216 A1; cited in Applicants' IDS).

Referring to Figures 11, 13, and 20, **Atkinson et al.** disclose a prosthetic foot comprising:

(i) A resilient foot (Figure 11: foot 454/456/458; Figure 13: foot 454/456/458; Figure 20: foot 754/756/758);

(ii) A resilient leg portion attached to the foot;

wherein the resilient leg portion includes a plurality of elongated, upwardly extending, substantially vertically oriented resilient members (Figure 11 and Figure 13: 412/452 and 486; Figure 20: 712/752 and 786) which are spaced apart in the sagittal plane intermediate their upper and lower ends, and which are anterior facing convexly curved at their lower ends (Figure 11 and Figure 13: lower end 434/424 and lower end 491; Figure 20: lower end 734/724 and lower end 791) to form an ankle area of the prosthesis and which extend upwardly above the ankle area to a substantially vertically oriented upstanding upper end of the leg portion, at least one of said plurality of resilient members (e.g., 412) is wider in the frontal plane than thick in the sagittal plane, the resilient leg portion storing energy during force loading of the prosthesis and return the stored energy during force unloading (e.g., controls anterior movement, and assists posterior movement) to increase the kinetic power generated for propulsive force by the prosthesis in gait.

Regarding claim 44, the figures clearly show the plurality of elongated members as fastened together at their upper and lower ends.

Regarding claim 46, the shank is 412/452 (Figures 11 and 13) and 712/752 (Figure 20), and the spring is 486 (Figures 11 and 13) and 786 (Figure 20).

Art Unit: 3774

Regarding claim 47 and claim 48, the “coupling means” is 495/496/497 (Figures 11 and 13) and 804/806 (Figure 20); the “fastener” is 488 (Figures 11 and 13) and 808 (Figure 20). The “stop” is 492/494 (Figures 11 and 13) and 794/798 (Figure 20).

Regarding claim 49, the “adapter” is any of the well known adapters/sockets attached to the top of the pylon. Or it could just be the upper-most end of the pylon.

Regarding claim 50, it is inherent a prosthesis mimicking a natural foot, or natural foot and shank, will have a “dorsiflexion moment” that at one given moment will have a magnitude greater than a “plantarflexion moment”.

Regarding claim 51, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured **Atkinson et al.** lower extremity prosthesis to have a ratio of dorsiflexion moment to plantarflexion moment of the prosthesis on the order of 11:1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). With regards to statements of intended use and other functional statements (e.g., *to increase the kinetic power; etc.*), they do not impose any

Art Unit: 3774

structural limitations on the claims distinguishable over the device of **Atkinson et al.**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

Response to Arguments

11. Applicant's arguments with respect to claim 43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Javier G. Blanco whose telephone number is (571)272-4747. The examiner can normally be reached on M- F (10am-7:30pm), first Friday of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, ***please contact the examiner's supervisor, SPE David Isabella, at (571) 272-4749***. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3774

If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to

TC3700_Workgroup_D_Inquiries@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Javier G. Blanco/

Examiner, Art Unit 3774

/David H. Willse/

Primary Examiner, Art Unit 3738